

**WHAT IS CLAIMED IS:**

1           1.     A method for controlling power in a communication system, comprising:  
2           determining a block error rate (BLER) based on data blocks received on a first  
3 transport channel and data blocks of at least a second transport channel; and  
4           determining a reference signal-to-interference (SIR) value corresponding to the  
5 first transport channel based on the BLER and a target BLER for the first transport  
6 channel.

1           2. The method of claim 1, wherein data blocks of at least the second transport  
2 channel are only considered for determining the BLER while data blocks are not  
3 received on the first transport channel.

1           3. The method of claim 1, wherein error rate information corresponding to the  
2 data blocks of the at least second transport channel is weighted according to at least  
3 one of channel coding, a code rate, rate matching, and a current SIR of the first and  
4 second transport channels.

1           4. The method of claim 1, wherein the BLER is determined according to cyclic  
2 redundancy check (CRC) information.

1           5. The method of claim 1, wherein the reference SIR is adjusted so that the  
2 BLER approaches the target BLER.

1           6. The method of claim 1, further comprising:  
2           comparing the reference SIR value to at least one other reference SIR value  
3 corresponding to another transport channel; and  
4           selecting a maximum one of the compared reference SIR values to be used for  
5 controlling power.

1           7.     An apparatus for controlling power in a communication system,  
2 comprising:

3           logic that determines a BLER based on data blocks received on a first transport  
4 channel and data blocks of at least a second transport channel; and  
5           logic that determines an SIR value corresponding to the first transport channel  
6 based on the BLER and a target BLER for the first transport channel.

1           8. The apparatus of claim 7, comprising:  
2           logic that only considers data blocks of at least the second transport channel, in  
3 determining the BLER, while data blocks are not received on the first transport channel.

1           9. The apparatus of claim 7, comprising:  
2           logic that assigns a weight to error rate information corresponding to the data  
3 blocks of the at least second transport channel according to at least one of channel  
4 coding, a code rate, rate matching, and a current SIR of the first and second transport  
5 channels.

1           10. The apparatus of claim 7, comprising:  
2           logic that determines the BLER according to CRC information.

1           11. The apparatus of claim 7, comprising:  
2           logic that adjusts the reference SIR so that the BLER approaches the target  
3 BLER.

1           12. The apparatus of claim 7, further comprising:  
2           logic that compares the reference SIR value to at least one other reference SIR  
3 value corresponding to another transport channel; and  
4           logic that selects a maximum one of the compared reference SIR values to be  
5 used for controlling power.

1           13. A method for controlling power in a communication system, comprising:  
2           determining a common BLER of data blocks received on a plurality of transport  
3 channels;  
4           determining a common target BLER for the plurality of transport channels; and

5           determining a reference SIR value corresponding to the plurality of transport  
6 channels based on the common BLER and the target BLER, said reference SIR being  
7 used for controlling power.

1           14.    An apparatus for controlling power in a communication system,  
2 comprising:  
3           logic that determines a common BLER of data blocks received on a plurality of  
4 transport channels;  
5           logic that determines a common target BLER for the plurality of transport  
6 channels; and  
7           logic that determines a reference SIR value corresponding to the plurality of  
8 transport channels based on the common BLER and the target BLER, said reference  
9 SIR being used for controlling power.

1           15.    A method for controlling power in a communication system, comprising:  
2           determining a BLER of data blocks received on a transport channel;  
3           estimating a block rate (BLR) of the data blocks received on the transport  
4 channel; and  
5           determining a reference SIR value corresponding to the transport channel based  
6 on the BLER, a target BLER, and the estimated BLR, said reference SIR being  
7 considered for controlling power.

1           16.    The method of claim 15, wherein the estimated BLR is used to maintain a  
2 constant rate of change of the determined reference SIR value for different estimated  
3 BLRs.

1           17.    The method of claim 15, wherein the BLER is determined according to CRC  
2 information.

1           18.    The method of claim 15, wherein the reference SIR is adjusted so that the  
2 BLER approaches the target BLER.

1           19. The method of claim 15, wherein the reference SIR is only considered for  
2 controlling power if the estimated BLR corresponds to at least a minimum channel  
3 excitation level.

1           20. The method of claim 19, wherein the channel excitation level is determined  
2 based on a product of the estimated BLR and the target BLER.

1           21. The method of claim 15, further comprising:  
2           comparing the reference SIR value to at least one other reference SIR value  
3 corresponding to another transport channel; and  
4           selecting a maximum one of the compared reference SIR values to be used for  
5 controlling power.

1           22. An apparatus for controlling power in a communication system,  
2 comprising:  
3           logic that determines a BLER of data blocks received on a transport channel;  
4           logic that estimates a BLR of the data blocks received on the transport channel;  
5 and  
6           logic that determines a reference SIR value corresponding to the transport  
7 channel based on the BLER, a target BLER, and the estimated BLR, said reference  
8 SIR being considered for controlling power.

1           23. The apparatus of claim 22, comprising:  
2           logic that uses the estimated BLR to maintain a constant rate of change of the  
3 determined reference SIR value for different estimated BLRs.

1           24. The apparatus of claim 22, comprising:  
2           logic that determines the BLER according to CRC information.

1           25. The apparatus of claim 22, comprising:  
2           logic that adjusts the reference SIR so that the BLER approaches the target  
3 BLER.

1           26. The apparatus of claim 22, comprising:  
2           logic that only considers the reference SIR for controlling power if the estimated  
3 BLR corresponds to at least a minimum channel excitation level.

1           27. The apparatus of claim 26, comprising:  
2           logic that determines the channel excitation level based on a product of the  
3 estimated BLR and the target BLER.

1           28. The apparatus of claim 22, further comprising:  
2           logic that compares the reference SIR value to at least one other reference SIR  
3 value corresponding to another transport channel; and  
4           logic that selects a maximum one of the compared reference SIR values to be  
5 used for controlling power.

1           29. A method for controlling power in a communication system, comprising:  
2           adjusting a reference SIR value downward incrementally;  
3           monitoring at least one transport channel associated with the reference SIR for  
4 block errors; and  
5           setting an initial reference SIR value for each of the at least one transport  
6 channels to the incrementally adjusted reference SIR value when a predetermined  
7 number of errors are received cumulatively on any of the at least one transport  
8 channels..

1           30. An apparatus for controlling power in a communication system,  
2 comprising:  
3           logic that adjusts a reference SIR value downward incrementally;  
4           logic that monitors at least one transport channel associated with the reference  
5 SIR for block errors; and  
6           logic that sets an initial reference SIR value for each of the at least one transport  
7 channels to the incrementally adjusted reference SIR value when a predetermined

- 8 number of errors are received cumulatively on any of the at least one transport
- 9 channels.